



## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/422,998	10/21/1999	DANIEL W. HEPNER	10990763-1	6218
75	590 01/16/2002			
HEWLETT PACKARD COMPANY INTELLECTUAL PROPERTY ADMINISTRATION 3404 E HARMONY ROAD			EXAMINER	
			PHAM, HUNG Q	
P.O. BOX 272400 FORT COLLINS, CO 80528-9599			ART UNIT	PAPER NUMBER
	.,		2172	

DATE MAILED: 01/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

H.6

•			14 6				
· .		Application No.	Applicant(s)				
Office Action Summary		09/422,998	HEPNER ET AL.				
		Examiner	Art Unit				
		HUNG Q PHAM	2172				
The Period for Rep	MAILING DATE of this communication app ply	ears on the cover sheet with the d	correspondence address				
THE MAILI - Extensions o after SIX (6) - If the period I - If NO period - Failure to rep - Any reply rec	ENED STATUTORY PERIOD FOR REPL' NG DATE OF THIS COMMUNICATION.  If time may be available under the provisions of 37 CFR 1.1 MONTHS from the mailing date of this communication. for reply specified above is less than thirty (30) days, a replifor reply is specified above, the maximum statutory period to be within the set or extended period for reply will, by statute leived by the Office later than three months after the mailing at term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nety filed  s will be considered timely. I the mailing date of this communication. D (35 U.S.C. § 133).				
1)∐ Res	ponsive to communication(s) filed on	<u> </u>					
2a)☐ This	s action is FINAL. 2b)⊠ Th	is action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of	f Claims						
4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.							
5)☐ Clain	n(s) is/are allowed.						
6)⊠ Clain	n(s) <u>1-20</u> is/are rejected.						
7)☐ Clain	7) Claim(s) is/are objected to.						
8)∏ Clain	n(s) are subject to restriction and/o	r election requirement.					
Application Pa	apers						
9)∏ The s	pecification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.							
If approved, corrected drawings are required in reply to this Office action.							
12) <b>□</b> The o	ath or declaration is objected to by the Ex	aminer.					
Priority under	35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)∐ All	b) Some * c) None of:						
1. Certified copies of the priority documents have been received.							
2.[	2. Certified copies of the priority documents have been received in Application No						
3.□ * See th	Copies of the certified copies of the prio application from the International Bu ne attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	_				
	wledgment is made of a claim for domest	•					
a) 🔲 🗆	The translation of the foreign language probable translation of the foreign language probable translation for domest	ovisional application has been re	ceived.				
Attachment(s)			<del></del>				
1) Notice of Re 2) Notice of Di	eferences Cited (PTO-892) raftsperson's Patent Drawing Review (PTO-948) Disclosure Statement(s) (PTO-1449) Paper No(s) _	5) Notice of Informal	y (PTO-413) Paper No(s) Patent Application (PTO-152)				

Art Unit: 2172

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 1-5, 11, 13, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi [6,108,492].

Regarding to claims 1 and 13, Miyachi teaches a method and a computer program product for reporting existence of a specified condition in a system attribute (see Abstract; Fig.4, col. 9, lines 34-47) comprises: "receiving a request from a client to notify said client of a condition of an attribute of a system, wherein said request comprises information specifying a query for said system attribute (see col. 9, lines 48-65); querying said system as specified by said request (see Fig. 5, col. 9, lines 39-41)";

Art Unit: 2172

and notifying the client of the existence of said condition (see col. 10, lines 44-46), except the step of "deriving data about said system attribute to determine if said condition exists". However, according to Miyachi, the client may be notified of any of the status conditions or the entire database (see col. 9, lines 44-46), this implies the step of deriving data of system attribute to determine the condition exists. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the step of deriving data and determining the existence of a predefined condition into the Miyachi method in order to prevent a nonexistence condition if a mistake was made in the step of querying.

Regarding to claim 2, Miyachi teaches all the claimed subject matters as discussed in claim 1 but fails to disclose the step of: "generating derived data based upon the result of said query of said system". However, according to Miyachi, the client may be notified of any of the status conditions or the entire database after the step of status condition selection (see col. 9, lines 39-46), this implies the step of generating derived data based on the result of selection step. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the step of generating data based on the result of querying in order to display the result in a predefined format.

Regarding to claims 3 and 16, Miyachi teaches all the claimed subject matters as discussed in claims 1, 13 and further discloses: "condition is a change in said attribute (see col. 9, lines 55-65)".

Art Unit: 2172

Regarding to claim 4, Miyachi teaches all the claimed subject matters as discussed in claim 1 and further discloses: the attribute is selected from the group of status of peripheral device, access to local peripherals (see col. 5, line 57-col. 8, line 60). Miyachi fails to disclose the attribute is selected from the group of: membership of nodes within a cluster, configuration of a cluster, failure of computer hardware, addition of shared peripherals, removal of shared peripherals, ownership of a shared peripheral, availability of shared peripherals for addition to a cluster, resilience to faults of a High Availability cluster, performance potential of a cluster, and any combination thereof. However, Miyachi discloses the background of the invention as a local area network (LAN), which linked one or more peripheral devices such as printers, facsimile machines, scanners or plotters and typically, the status of a device (see col. 9, lines 10-24). Thus, the Miyachi status tables as in col. 6-8 can be modified to have the condition state of a node if a user wants to know the condition of a node within a cluster or the configuration of a cluster and even the condition to indicate the failure of computer hardware, addition of shared peripherals, removal of shared peripheral, ownership of a shared peripheral, availability of shared peripherals for addition to a cluster, resilience to faults of a High Availability cluster, performance potential of a cluster. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi status table in order to query the condition of a network's device especially the condition about the status of a node within a cluster when a new node is added or deleted from the system.

Art Unit: 2172

Regarding to claim 5, Miyachi teaches all the claimed subject matters as discussed in claim 1 but fails to disclose: "client is selected from the group consisting of a user and a client application program". However, Miyachi teaches the method allows a technician to select the number of the status condition to monitor after the program has been loaded (see col. 9, lines 39-41). This implies a user from the group of a user and a client application program. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the step of selection of client from the group of a user and a client application program into the Miyachi method in order to distinguish the client with the server in a network.

Regarding to claim 11, Miyachi teaches all the claimed subject matters as discussed in claim 1 but fails to disclose: "client is a graphical user interface (GUI) that displays information to a human user". However, Miyachi teaches the client may be notified of any of the status conditions or the entire database (see col. 9, lines 44-47), this implies a graphical user interface that displays information to a human user. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi method to have a graphical user interface in other to display information to a human user.

Regarding to claim 18, Miyachi teaches a system for reporting existence of a specified condition in a system attribute (see Abstract; Fig.4, col. 9, lines 34-47) comprises:

"means for storing a reporting application (see Fig. 2, col. 5, lines 33-40)";

"a means for executing said reporting application (see Fig. 2, col. 5, lines 33-35)";

Art Unit: 2172

"wherein said reporting application includes computer executable software code for receiving from a client a request to notify said client of a condition of an attribute of a system, said request comprising information specifying a query for said system attribute (see col. 9, lines 48-65), computer executable software code for notifying said client of the existence of said condition (see col. 10, lines 44-46)", except the step of determining if a condition exist. However, according to Miyachi, the client may be notified of any of the status conditions or the entire database (see col. 9, lines 44-46), this implies the step of determining the condition exists for notification. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the step of determining the existence of a predefined condition into the Miyachi system in order to prevent a nonexistence condition if a mistake was made in the step of querying.

Regarding to claim 19, Miyachi teaches all the claimed subject matters as discussed in claim 18 but fails to disclose: "client is selected from the group consisting of a user and a client application program". However, Miyachi teaches the system allows a technician to select the number of the status condition to monitor after the program has been loaded (see col. 9, lines 39-41). This implies a user from the group of a user and a client application program. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to include the step of selection of client from the group of a user and a client application program into the Miyachi system in order to distinguish the client with the server in a network.

Art Unit: 2172

Regarding to claim 20, Miyachi teaches all the claimed subject matters as discussed in claim 18 and further discloses the system comprises: "multiple nodes, wherein at least one of said nodes is executing said reporting application (see Fig. 1-2, col. 4-5)".

4. Claims 6-10, 12, 14-15, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyachi [USP 6,108,492] in view of Sybase [Transact-SQL User's Guide, Copyright 1996].

Regarding to claims 6 and 14, Miyachi teaches all the claimed subject matters as discussed in claims 1, 13 and further disclose: the status information are stored in a database and a client (a technician) may select some or all of the information for a predefined trigger condition (see col. 3, line 60-col. 4, line 5; Fig. 4, col. 9, lines 34-47), but fails to teach that: "information specifying a query for said system attribute is an SQL query". Sybase teaches SQL as a high-level language for relational database systems and using guery as a request for retrieval of data by using the select command (see Chapter 1: Introduction, Overview and Queries, Data Modification, and Commands). Thus, the program that is loaded to step 410 of Miyachi method (see Fig. 4, col. 9, lines 34-47) can use SQL as a language for storing status information into the database and the guery for system attribute will be a SQL guery by using select command. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi program at step 410 by using SQL as a high level language to write the program in order to have a relational database and to select a status information by an SQL query.

Art Unit: 2172

Regarding to claims 7 and 15, Miyachi and Sybase teach all the claimed subject matters as discussed in claims 6, 14 and Sybase further discloses: "SQL query comprises an SQL view (see Sybase, Chapter 8, Views: Limiting access to Data, Creating Views)".

Regarding to claim 8, Miyachi teaches all the claimed subject matters as discussed in claim 1 and further disclose: the status information are stored in a database and a client (a technician) may select some or all of the information for a predefined trigger condition (see col. 3, line 60-col. 4, line 5; Fig. 4, col. 9, lines 34-47), but fails to teach that: "information specifying a query for said system attribute comprises multiple transactions bracketed together". Sybase teaches SQL as a highlevel language for relational database systems and using query as a request for retrieval of data by using the select command and information specifying a query comprises multiple transactions bracketed together (see Chapter 1: Introduction, Overview and Queries, Data Modification, and Commands; Chapter 2: Queries: Selecting Data From a Table, What are Queries). Thus, the program that is loaded to step 410 of Miyachi method (see Fig. 4, col. 9, lines 34-47) can use SQL as a language for storing status information into the database and the query for system attribute will be an SQL query by using select command that comprises multiple transactions bracketed together. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi program at step 410 by using SQL as a high level language to write the program in order to have a relational database and

Art Unit: 2172

to select a status information by an SQL query that comprises multiple transactions bracketed together.

Regarding to claims 9 and 17, Miyachi teaches all the claimed subject matters as discussed in claims 1, 13 and further discloses: the status information are stored in a database and a client (a technician) may select some or all of the information for a predefined trigger condition (see col. 3, line 60-col. 4, line 5; Fig. 4, col. 9, lines 34-47), except the multiple conditions are bracketed together. Sybase teaches SQL as a highlevel language for relational database systems and using query as a request for retrieval of data by using the select command and information specifying a query comprises multiple conditions bracketed together (see Chapter 1: Introduction, Overview and Queries, Data Modification, and Commands; Chapter 2: Queries: Selecting Data From a Table, What are Queries). Thus, the program that is loaded to step 410 of Miyachi method (see Fig. 4, col. 9, lines 34-47) can use SQL as a language for storing status information into the database and the query for system attribute will be an SQL query by using select command that comprises multiple conditions bracketed together. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi program at step 410 by using SQL as a high level language to write the program in order to have a relational database and to select a status information by an SQL query that comprises multiple conditions bracketed together.

Regarding to claim 10, Miyachi and Sybase teach all the claimed subject matters as discussed in claim 9, Miyachi further discloses a client (a technician) may select

Art Unit: 2172

particular values for a trigger notification. For example, the client will be notified when a counter fuser reaches a particular value (see col. 9, lines 55-65). Miyachi fails to disclose the multiple changes are bracketed together. By using SQL as a high level language, Sybase teaches the condition that trigger a notification in "if update" clause, in which multiple changes are bracketed together (see Chapter 14, Triggers: Enforcing Referential Integrity, Creating Triggers). Thus, the Miyachi program can use SQL to implement the step of trigger notification by bracketing multiple changes together and if the changes exist, the client will be notified. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi program by using SQL as a high level language to write the program in order to have a relational database and to have a trigger notification when a condition comprises multiple condition bracketed together.

Regarding to claim 12, Miyachi teaches all the claimed subject matters as discussed in claim 11 and further discloses: GUI displays information about one or more attributes of a system to a human user (see col. 9, lines 44-47). Miyachi fails to teach the step of "deriving data comprises deriving data to determine if a condition of said one or more attributes exists such that the GUI should redraw the graphics displaying said information about said one or more attributes". Sybase teaches retrieving data through views by using SQL, the SQL server checks to make sure that all the database objects exist and create a view that includes all the attributes as indicate in the condition of the query (see Chapter 8, Views, Limiting Access to Data, What are Views?, Retrieving Data through Views). Thus, the Miyachi method can use SQL to implement the step of

Art Unit: 2172

condition determination and graphic redrawing to make sure the attributes exist and provide a view for these attributes. Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the Miyachi method by applying SQL to implement the steps of condition determination and graphic redrawing to determine if a condition of one or more attributes exists such that GUI could redraw the graphic displaying.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Pham whose telephone number is 703-605 4242. The examiner can normally be reached on Monday-Friday, 7:00 Am - 3:30 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VU, KIM YEN can be reached on 703-305 4393. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746 7239 for regular communications and 703-746 7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305 3900.

**Examiner: Hung Pham** 

Jan 4 2002

SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 2100